

POPOVA, A.I., VASIUTINSKAYA, L.A.; PENENKOV, B.L.

Two cases of systemic scleroderma. Sov.med. 26 no.1:120-122
Ja '63. (MIRA 16:4)

1. Iz onkologicheskogo (zav. Ye.S.Podiprets) i nervnogo (zav.
Ye.P.Dmitriyeva) otdeleniy Basseyenovoy bol'nitsy moryakov
Chernomorsk-Azovskogo vodzdravotdela, Odessa.
(SCLERODERMA)

VASK, ARTUR

Haljaskonveier. Tallinn, Eesti Riiklik Kirjastus, 1957. 35 p. (Eesti NSV Poliitiliste ja Teadusalaste Teadmiste Levitamise Uhing. (Valjaanne) nr. 5) (Green fodder supply. forms, tables.)

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

VASKA, V.

Contribution on testing and accepting vegetable oils, p. 142,
SLEVARENSTVI (Ministerstvo strojarnstvi a Ministerstvo hutniho
prumyslu a rudnych dolu) Praha, Vol. 3, No. 5, May 1955

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 4, No. 12, December 1955

VASKA, V.

Abstracts of lectures delivered at the International Foundry Congress
in Florence, p. 145, SLEVARENSTVI (Ministerstvo strojiernstvi a
Ministerstvo hutniho prumyslu a rudnych delu) Praha, Vol. 3, No. 5,
May 1955

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 4, No. 12, December 1955

Vaska, V.

Vaska, V. A contribution to the testing and evaluating of seed oils. p. 17.

Vol. 5, no. 1, Jan. 1957

SLEVAKENSTVI

TECHNOLOGY

Czechoslovakia

So. East European Accessions, Vol. 6, May 1957

No. 5

VASKAN, G.K.

L-6

USSR/Cultivated Plants - Fruits. Berries.

Abs Jour : Ref Zhur - Biologiya, No 16, 25 Aug 1957, 69363

Author : Vaskan, G.K.

Inst :

Title : What are the Best Intervals for Apple Orchard Fertilization?

Orig Pub : Sadovodstvo, Vinogradarstvo i vinodelie Moldaviy, 1956, No 4, 21.

Abst : The experiments were conducted on a variety of snowy Kalvil in an irrigated garden of Frunze state farm (Tiraspol) on plots of 800 m². The fertilizers were added in selected spots in liquid form to a depth of 30 cm. Variants of NPK: 1) without fertilization; 2) 45-60-20 before bud opening; 3) 45-60-30 before bud opening 30-45-15 before flowering and during ovary shedding; 4) 45-60-30 before bud opening 30-45-15 before differentiation of flower buds; 5) 45-60-30 before bud opening,

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USSR/Cultivated Plants - Fruits. Berries.

L-6

Abs Jour : Ref Zhur - Biologiya, No 16, 25 Aug 1957, 69363

30-40-15 before differentiation of fruit buds and 30-60-30 during ovary shedding; 6) 45-60-30 before bud opening, 30-45-15 before flowering, 30-45-15 during ovary shedding, and 22-45-15 before differentiation of fruit buds. The average yield per tree with these variants were as follows: 1) 86; 2) 106; 3) 110; 4) 169; 5) 221 and 6) 262 kg. The total yearly added growth exceeded the control in variants 6,4,3 and 2; in average length of shoots -- variants 4,6,3 and 2; and in average length of shoots -- variants 4,6,2 and 5. (Note: possible misprint) The authors believe that the best times for adding fertilizers in small doses to apple trees are before bud opening, before blooming, during the ovary shedding and before differentiation of fruit buds.

Card 2/2

COUNTRY : USSR
 CATEGORY : Cultivated plants. Fruits. Berries. E
 ABS. JOUR. : RZhBiol., No. 23 1958 No. 10, 924
 AUTHOR : Vaskun, G. ...
 INST. : ~~Scientific Research Institute of Orchard~~
 TITLE : Effect of Mineral and Organic Fertilizers on the Growth and Fruiting of Apple Tree.
 ORIG. PUB. : Tr. Mold. n.-l. inst. sadovodstva, vinogradarstva i vinodeliya, 1957, 3, 131-132
 ABSTRACT : In 1951-1953, at the experimental base of the Institute (the city of Nishinev) and in the orchard of sovkhos imeni Frunze (the city of Minskopol'), experiments were conducted on the fertilization of apple trees Renet bamashny, Vagnera prizovoye and Karman zimniy zolotoy, grafted on doucin, and at sovkhos on strong-growing wild apple tree planted in 1933 and 1929 respectively. On the leached
 *) Cultivation, Viticulture and wine making.

CARD: 1/4

152

COUNTRY	:	
CATEGORY	:	
ABS. JOUR.	:	RZhPriol., No. 23, 1958, No. 104854
AUTHOR	:	
INST.	:	
TITLE	:	
ORIG. PUB.	:	
ABSTRACT	:	<p>best character, in unirrigated conditions, most effective proved to be doses of NPK 120, NPK 90 and NPK 60+40 tons/ha of humus which increase the yield by 33-50% with the autumn application of them to the soil. Application of organic-mineral fertilizers for the variety Genet bunazhnyy at the rate of 60 kilograms/ha produced the best effect in regard to the accretion of wool and increased fruiting in comparison with the powdered fertilizers applied at the rate of NPK 120 and humus 40 tons/ha. A better effect was secured with method of deep focal application into holes 55 cm in depth also in furrows</p>
CARD:	2/4	

COUNTRY :
CATEGORY :
ABS. JOUR. : RZhBiol., No. 195 8 No. 104854
AUTHOR :
INST. :
TITLE :
ORIG. PUB. :
ABSTRACT : 35 cm in depth than with the embedment to the depth of
22 cm. Spaced application of fertilizers in 3 periods
(NPK 60+sumus at the rate of 40 tons/ha in autumn,
NPK 30 in early spring and NPK 30 after blossoming)
produced a better effect in regard to the acrotion of
wood, leaf blades and the aggregate amount of the crop
in comparison with the application of the same amount of
fertilizers in one period. Considerable effect was also

CARD: 3/4

153

COUNTRY :
CATEGORY :

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104354

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : obtained in the variant with the application of organic-
mineral fertilizers: humus at the rate of 40 tons/ha in
autumn and APK 120 in spring. -- Io. V. Kolesnikov

CARD: 4/4

VASKAN, Grigoriy Kuz'mich; FITOVA, L., red.; KURMAYEVA, T., tekhn.red.

[Soil cultivation in fruit-bearing orchards] Ukhod za pochvoi
v plodonosiashchem sadu. Kishinev, Gos.izd-vo "Kartia moldoveniaske,"
1961. 22 p. (MIRA 14:6)
(Fruit culture) (Tillage)

GUZINSKIY, D.Ya.) VASKAN, G.K., nauchnyy sotr.; POLIKARPOV, V.P.; FITOVA, L.;
red.; ZHEMANYAN, N., tekhn. red.

[Orchards on the Dniester terraces; development of fruit culture on
the "Put' k kommunizmu" Collective Farm in Dubossary District] Sady
na terrasakh Dnestra; iz opyta razvitiia sadovodstva kolkhoza "Put' k
kommunizmu" Dubossarskogo raiona. Kishinev, Gos. izd-vo "Kartia mol-
doveniaske," 1961. 59 p. (MIRA 14:7)

1. Predsedatel' kolkhoza "Put' k kommunizmu" Dubossarskogo rayona (for
Guzinskiy). 2. Nauchno-issledovatel'skiy institut sadovodstva, vino-
gradarstva i vinodeliya (for Vaskan, Polikarpov)
(Dubossary District—Fruit culture)

VASKAN, G.K.; GURBONOV, E., red.; GORYACHENKO, F., tekhn. red.

[Soil management in orchards of Moldavia] Soderzhanie pochvy v
sadakh Moldavii. Kishinev, Izd-vo sel'khoz.lit-ry, 1962. 38 p.
(MIRA 16:3)

(Moldavia—Fruit culture)
(Moldavia—Soil conservation)

NOVAK, A.; ORAVCOVA, V.; VASKEBOVA, M.

Contribution to meningoencephalitis mumps. Cesk pediat
18 no. 3:209-213 '63.

1. II. detska klinika Lekarskej fakulty UK v Bratislave,
prednosta prof. dr. J. Michalickova Krajska hygienicko-
epidemiologicka stanica v Bratislave, riaditel dr. F.
Schulz.

(MUMPS) (MENINGOENCEPHALITIS)

NOVAK, A.; BENKO, J.; MAJERCHA, A.; VASKEBOVA, M.

Apropos of diseases simulating infectious infantile paralysis.
Bratisl. lek. listy 44 no.3:139-147 15 Ag '64.

1. Katedra pediatrie II lek. Fak. Univ. Komenskeho v Bratislave (veduca prof. MUDr. J. Michalickova); Detske infekcne oddelenie
- 2 polikliniky s postelovou castou MCHZ v Bratislave (veduca MUDr. M. Vaskebova) a Krajska hygienicko-epidemiologicka stanica v Bratislave (riaditel MUDr. F. Scholz).

PROKOPCHIK, A.Yu. [Prokopcik, A.]; VASHKYALIS, A.I. [Vaskelis, A.]

Study of the properties of peroxycarbonates in solution. Report
No. 1: Problem of the "actual existence" of peroxy carbonates
and their oxidation-reduction potentials. Trudy /N Lit. SSSR.
Ser. B no. 1:61-71 '63. (MIRA 17:5)

1. Institut khimii i khimicheskoy tekhnologii AN Litovskoy SSR.

VASKELIS, V.

Apropos of isolated rectal injuries. Sveik. apsaug. 9 no.1:
46-47 Ja'64.

1. Kauno I tarybine klinine ligonine.

*

S/137/62/000/001/131/237
A052/A101

Author: Vaskes, Vite Dzheronimo
Title: The effect of sulfur on mechanical properties of high-strength grey iron
Periodical: Referativnyy zhurnal. Metallurgiya, no. 1, 1962, 26, abstract 11175 (V sb. "26-y Mezhdunar. kongress liteyshchikov, 1959", Moscow, Mashgiz, 1961, 523 - 529)

Text: The effect of S on the structure of cast iron and graphite was studied, as well as the difference between S contained in the form of FeS and in the form of MnS, and also the possibilities to neutralize the effect of FeS and to reduce the S content by desulfurization. It is established that the presence of S in cast iron is desirable in the form of MnS, that the S content must not exceed a certain upper limit, notwithstanding the fact that it is theoretically completely neutralized. If this limit is surpassed, desulfurization must be made. The effect of S on tensile strength, hardness and structure was studied. It is established that in the case of high-strength grey iron containing 0.095 and 0.180% S, 81% of tested samples have $\sigma_s > 26 \text{ kg/mm}^2$; at the S content from

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S/137/62/000/001/131/237
A092/A101

The effect of sulfur ...

0.010 to 0.095% only 20% of tested samples have $\sigma_s > 26 \text{ kg/mm}^2$. The hardness of samples increases with the S content. In machine parts with a low S content much ferrite is observed. The graphite content is lower in parts with a high S content. S is not always a harmful element in cast iron, in some cases it is a necessary and desirable element.

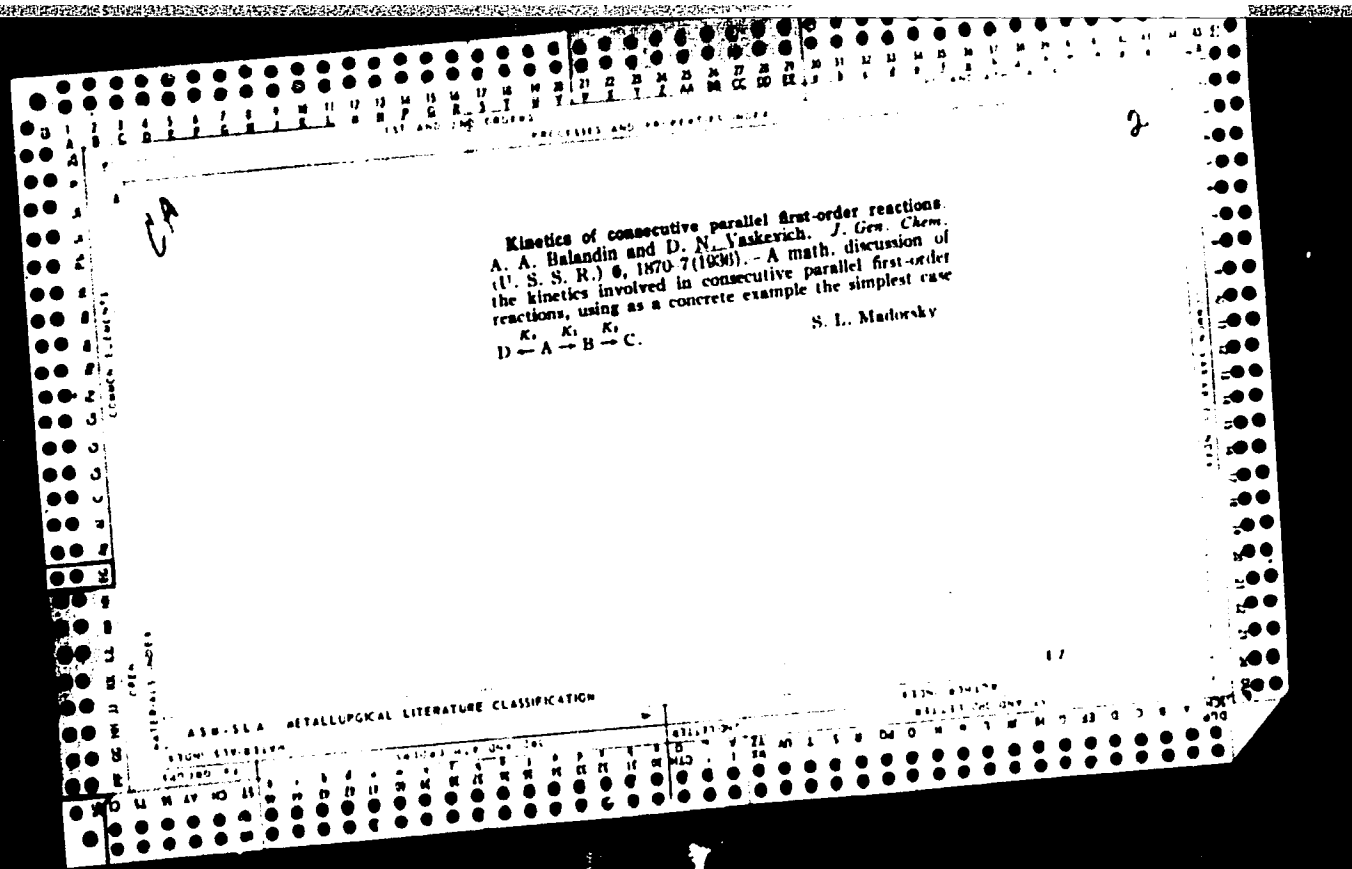
A. Savel'yeva

[Abstracter's note: Complete translation]

Card 2/2

VASKEVICH, D.N.

Scientific and technological conference on the methods for the
analytical control in industry of plastic materials, varnishes
and dyes, synthetic fibers, and synthetic rubber. Zhur. VKHO
9 no. 5:577-579 '64. (MIRA 18:1)



CA

Mechanism of the decomposition of hydrazones and the theory of multiplets. Kinetics of the catalytic decomposition of cyclohexylidenehydrazine hydrate. A. A. Halandin and D. N. Vaskevich. *J. Gen. Chem.* (U. S. S. R.) 6, 1878 (1937); *Cl. C. A.* 30, 4073. The multiplet theory of catalysis requires that the Kuhn-Wolff reaction (cf. *C. A.* 7, 780) for the formation of hydrocarbons by decomposition of hydrazones on a Pt catalyst pass through the intermediate stage of diimine formation. By use of the kinetic method of parallel alternative reactions, described previously (cf. preceding abstract), it is experimentally found that the decomposition of cyclohexylidenehydrazine hydrate (I) on Pt or KOH catalyst to cyclohexane (II) actually passes through such an intermediate stage. The diimine (III) is very unstable with a half-time period of 34.5 sec. at 150°. The reaction rate constants for the formation of III, its decomposition to II, and for the formation of cyclohexanol (IV) are determined and the reactions shown to be first order. By variation of the reaction conditions the decomposition of I may be directed to yield chiefly IV. Energies of activation for the catalysts used are: Pt 43,500 cal/mol.; Pt + KOH (1:10) 18,300; Pt + KOH (1:50) 12,400; KOH 20,200. In the absence of catalyst I slowly changes to dicyclohexylidenehydrazine. John Livak

Esterification of alcohols by catalytic dehydrogenation
D. N. Yaskovich and T. P. Balanova. *J. Gen. Chem.* (U. S. S. R.) 8, 1001-7 (in English, 1967) (1968). -- MeOH, EtOH, iso-BuOH and iso-AmOH were dehydrogenated at atm. pressure and 270 °C by passing mixts of 2 alcs. in all the possible combinations at the rate of 12-15 ml./hr. over the catalyst Cu-Mn (3:1) activated with Ag. The latter was prepd. by treating the nitrates with aq. NaOH, drying the washed ppt. at 105° and activating in EtOH at 300°. After the dehydrogenation for 40 hrs. the catalyst showed no signs of deactivation. The preliminary results in the analysis of the catalyzates indicate the presence of 30% esters, considerable unaltered alcs., some aldehydes and practically no acids. The general trend of the reaction is toward the formation of fewer esterification products than is theoretically possible and the acidic radical contains the smaller no. of C atoms. Thus, a mixt. of MeOH and iso-AmOH gave chiefly iso-Am formate and some Me isovalerate instead of the 4 theoretically possible esters, while iso-BuOH with iso-AmOH formed practically only iso-Am isobutyrate. MeOH with iso-BuOH gave iso-Bu formate and a little

Me isobutyrate. The investigation is being continued. Twenty references. Chas. Blanc

<p>CA</p> <p>13</p> <p>Production of urea plastic masses for consumer goods D. N. Vaskevich. <i>Informatsionno-Tekhn. Byull. Glavkhimplasta</i> 1940, No. 6, 36-45; <i>Khim. Referat. Zhur.</i> 4, No. 7, 113(1941).--Methods of the "cold" (at room temp.) and "hot" (at higher temps.) condensation of urea with CH_2O were used. Cold condensation gives greater water resistance. Expts. were made on the production of complex resins based on urea, dicyanodiamide, methyleneurea and thiourea. The addn. of thiourea improved the water resistance of the product. The splitting off of CH_2O by urea plastics under the influence of water was studied in detail. Urea resin was modified by phenol to obtain water-stable resins. A complex resin was obtained by mixing 2 resins prepd. separately: methyleneurea resin and phenol resin with a basic catalyst. The physicochem. consts. of the domestic and imported urea plastics are compared. W. R. Henn</p>																									
<p>ASB-SEA METALLURGICAL LITERATURE - ASSIMILATION</p>																									

COMMON ELEMENTS		COMMON VARIABLE MOLE	
<p>CA</p> <p>The action of emulsifying agents upon the stability of (aqueous dispersions of) synthetic resins. D. N. Vaskovich and J. I. Baklanov. <i>Compt. rend. acad. sci. U. R. S. S. S.</i>, 254-6(1943) (in English).—Aq. dispersions of synthetic resins were prepd. by first heating together 40 g. of phenol, 90 g. of 20% aq. HClO and 2 g. of NaOH to 60° for 3 hrs., then adding 95 g. of diacrylamide, 120 g. of 20% aq. HCHO and 1% to 10% of Turkey-red oil (I) and heating to 80° for 3 hrs. These reaction conditions are such that I remains unreacted. Differences in the amts. of I in the resin dispersions have a profound effect on colloidal properties such as viscosity, heat of assocn. of dispersed particles (calcd. from viscosity detns. at 20°, 40°, 60°, 80°; cf. C. A. 31, 2887) and ability to withstand coagulation on diln. with water. On plotting data relating to these colloidal properties against percentage of I in the resin, the various curves exhibited 2 max. and 2 min. which were coincident with respect to the quantity of I in the resin. This peculiar situation is explained by the hypothesis that successive changes in the character of the surface layer of the dispersed resin particles occur as the quantity of I is varied.</p> <p>J. W. Perry</p>		17	
ASB-31A METALLURGICAL LITERATURE CLASSIFICATION			
<p>ASB-31A</p> <p>ASB-31A</p>		<p>ASB-31A</p> <p>ASB-31A</p>	

VASKEVICH, D. N.

Reaction of polymethyleneurea with formaldehyde.

D. N. Vaskevich and M. Ya. Reingach. *Bull. acad. sci. U.R.S.S., Classe sci. chim.* 1946, 71-5 (in Russian).—Heating polymethyleneurea with formalin led to the following conclusions: decrease of pH increases destruction of the polymer; optimum ratio of CH_2O to the polymer is 2 moles: 1 mole; soly. of the polymer increases with increased formalin concn., while the amt. of free CH_2O varies but little. The process of chain scission is apparently a combination of a phys. colloidal peptization and chem. destruction of the polymer. The starting polymer was: m. 224-6°, 38.3% N, 0.83% methylol group; soly. in boiling formalin 30%. The formalin soln. at 90-5° was treated over 0.5 hr. with the polymer and the catalyst; after 1.5-2 hrs. the mixt. began to boil and continued for 5 hrs.; the hot soln. was filtered, and the insol. residue was analyzed for unreacted polymer (by weighing); the filtrate was analyzed for free CH_2O , and its pH was taken. Use of 40% formalin and 1% $(\text{CO}_2\text{H})_2$ catalyst gave the following results: 1.5 mols. CH_2O per mol. polymer, 40-5% unreacted polymer, 0% free CH_2O in soln.; 2.0, 30-6%, and 0-7%, resp.; 3.0, 60-5, 15-16. The reaction was obviously heterogeneous and depended on peptization of the polymer. In all following expts. the optimum 2/1 mol. ratio was used. Increase of the catalyst to 2% had the effect of decreasing the unreacted polymer to 15-20%; use of 1% (by wt.) of H_3PO_4 gave 60-5% unreacted polymer and 10-10.5% free CH_2O ; increase of H_3PO_4 to 2% gave 38-40% unreacted polymer and 8-10% free CH_2O .

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The effect of pH is shown by the following summary (40% formalin, 2/1 mol. ratio, 1% catalyst): without catalyst, pH 6.0-6.5, 65-70% unreacted polymer, 10-11% free CH_2O ; H_3PO_4 , 4.0-4.5, 60-5, 10-10.5; $(\text{CO}_2\text{H})_2$, 3.0-3.5, 30-5, 7-8; HCl , 2.5-2.7, 0-8, 6-7. The destruction of the polymer is almost linearly dependent on pH to 3.0-3.5, while further pH decrease gives a much sharper extent of reaction. Increase of CH_2O concn. in the formalin rapidly increases the extent of the reaction, as shown in the following summary. With 1% $(\text{CO}_2\text{H})_2$ catalyst and 2/1 mol. ratio of CH_2O , 20% formalin gave 65-70% unreacted polymer and 5-6% free CH_2O , while increase of formalin concn. to 30% gave 32-6% unreacted polymer and 5-6% free CH_2O ; with 1% HCl catalyst under similar conditions, 20% formalin left 60-5% unreacted polymer and gave 5-5.5% free CH_2O ; 30% formalin gave 26-30% unreacted polymer and 4-5% free CH_2O ; 37% formalin

left 12-15% unreacted polymer and gave 4-6% free CH_2O , while 40% formalin left 0-8% unreacted polymer and gave 0-7% free CH_2O .

G. M. Kosolapoff

Kinetics of the direct esterification of alcohol. B. L. Zel'dchuk, D. N. Vaskovich, A. P. Helen'kaya, and P. A. Dashkovskaya (Inst. Org. Chem., Acad. Sci. U.S.S.R., Moscow). *Izv. Akad. Nauk S.S.S.R., Khim. Nauk* 1946, 101-201; cf. C.I. 42, 4836. (1) Expts. were made with 10% alc. at the const. space velocity of 400 ml./l. catalyst. The catalysts were prepd. by pptg. with alkali from Cu acetate and the nitrate of the corresponding promoter, washing to neutral, and drying at 100°. From analyses of the products obtained at 250, 275, and 300°, the a.mts. of the primarily formed AcOH, AcOH, and AcOH were calcd. on the basis of the assumed reaction mechanism (I) $\text{EtOH} \rightarrow \text{AcH} + \text{H}_2$, (II) $\text{AcH} + \text{H}_2\text{O} \rightarrow \text{AcOH} + \text{H}_2$, (III) $\text{AcOH} + \text{H}_2 \rightarrow \text{AcOH} + \text{H}_2\text{O}$; the original amt. of AcH was obtained by multiplying the final ester and acid by 0.623 and 0.770, resp., and adding to the amt. of AcH found in the product; similarly, the original amt. of AcOH is obtained by multiplying the final ester by 0.685 and adding to the AcOH found in the products. The yields of reactions I, II, and III, detd. in this way, satisfy the Arrhenius linear relation between $\log k$ and $1/T$ (assuming the yield to represent the reaction velocity k), on Cu-Zn, Cu-Fe, Cu-Zr, and Cu-Ce catalysts, and permit calcn. of the apparent activation energies E . Reaction II obviously plays a secondary role. (2) Only elements of the 4th and 6th group of the periodic system promote the Cu catalysis of the direct esterification. Elements of the 5th group have little effect, as they promote decompn. of AcH into CO and CH_4 . For elements of the 3rd group, the yield y of ester increases linearly with the at. no. For each catalyst (amt. of promoter in % of the wt. of Cu), y at 275° (in wt. %), E of reactions I, II, and III (kcal./mole), and the primary yields (in wt. % of reaction I, II, and III, are given in the following: Cu, 12.3, 3.5, 8.05, 3.8, 35.0, 15.5, 12.3; Ag (5) 0.2, 0.7, 0.3, 0.2; Be (1.8) 9.9, 8.0, 8.4, 30.5, 12.7, 9.9; Mg (1.0) 4.8, 5.1, 0.7, 4.5, 33.9, 10.6, 4.8; Zn (0.5) 5.0, 4.0, 0.5, 3.4, 37.9, 12.5, 0.0; Al (5.0) 12.3, 0.0, 0.0, 4.1, 30.2, 18.8, 18.8; In (0.2) 0.4, 4.5, 6.6, 11.3, 11.0, 0.4, 11.0, 6.7, 6.85, 0.1, 2.3, 41.7, 7.0, 6.7; La (0.2) 10.7, 8.1, 11.95, 4.1, 45.4, 16.6, 10.7; Ce (0.2) 33.7, 3.55, 7.1, 0.15, 37.6, 28.7, 33.7; Ti (4.0) 28.0, 5.2, 5.8, 4.05, 31.1, 18.4, 21.8; Zr (0.9) 39.8, 5.85, 7.05, 6.6, 32.5, 20.7, 36.7; Th (0.2) 34.3, 0.1, 7.8, 3.75, 0.0, 10.0, 14.2, 36.7; V (0.2) 1.1, 2.8, 3.6, 1.05, 1.1; Cr (2.0) 23.0, 4.2, 0.3, 4.1, 47.9, 22.1, 22.8; U (0.1) 55.7, 44.8, 40.9, 4.1, 47.9, 22.1, 22.8; Fe 5.8, 8.8, 11.0, 13.15, Mn (4) 6.1, 40.9, 7.9, 4.7; Fe 5.8, 8.8, 11.0, 13.15, 35.6, 14.6, 5.8; Co (0.5) [at 255°] 16.6, 33.2, 13.6, 14.0; Ni (0.5) [at 255°] 11.0, 7.1, 3.0, 8.15, 25.0, 14.0, 10.6. If the total y obtained with the various catalysts is plotted against E of reactions I, II, and III, the curve, in each case, passes through a max. situated, for I, in the region 3.5-6.0, for II at 6.2-7.7, for III at 4.5-6.5 kcal./mole. (3) If the total y is plotted as a function of the ratio $y_{\text{II}}/y_{\text{I}}$ of the yields (rates) of reactions I and II, y is seen to decrease linearly with increasing $y_{\text{II}}/y_{\text{I}}$ from $y_{\text{II}}/y_{\text{I}} = 0.89$ to 2.0; at this point (corresponding to Cr, Al) there is a discontinuous drop of y , followed by further linear decrease with a somewhat less steep slope. Consequently, the condition of a high $y_{\text{I}} < y_{\text{II}}$ as a function of $y_{\text{II}}/y_{\text{I}}$, the total y decreases continuously with increasing values of that ratio. In other words, best y will be attained with catalysts for which $y_{\text{I}} < y_{\text{II}}$. Combination of the two requirements gives $y_{\text{I}} < y_{\text{II}}$. (4) Plots of y against the ratios of the activation energies of the steps $E_{\text{I}}/E_{\text{II}}$ and $E_{\text{II}}/E_{\text{III}}$ also show distinct maxima, in the regions $E_{\text{I}}/E_{\text{II}} = 0.8-1.1$ and $E_{\text{II}}/E_{\text{III}} =$

1.1-1.5 kcal/mole. This gives the condition for high total yields of ester: $E_I \approx E_{III} < E_{II}$. Actually, best yields of AcOH are obtained at the space velocity of EtOH of 150-200 ml./l. catalyst/hr., best yields of AcOEt at 300-400. If so, there should be no unreacted AcOH left in the final products of the esterification. That, nevertheless, not all the AcOH undergoes reaction III, but some of it appears in the products, is evidently due to the scarcity of points specifically active for reaction III. For the same reason, not all the EtOH is esterified, despite the low E_{III} . Thus, the effect of kinetic factors may be overshadowed or limited by specific effects of the catalyst surface. II. Effect of the composition of two-component catalysts on the reaction kinetics. *Ibid.* 1946, 411-17.

(1) The different effects of varying the amt. of the promoter (in % of the wt. of Cu) are illustrated by the following data of y , E_I , E_{II} , E_{III} , y_I , y_{II} , y_{III} (at 275°): Cu (2.3, 3.6, 8.65, 3.8, 34.0, 15.5, 12.3; Zn (0.5) 6.0, 3.0, 9.5, 3.4, 37.9, 12.5, 6.0; Zn (5.0) 4.0, 5.4, 4.25, 8.7, 31.1, 9.0, 4.6; Al (0.5) 2.7, -, -, 15.5, 2.3, 2.7; Al (5.0) 15.8, 0.0, 0.9, 4.1, 39.2, 18.8, 15.8; Ti (0.2) 0.7, 1.85, 6.1, 2.3, 25.8, 7.0, 0.7; Ti (1.0) 12.0, 1.6, 11.7, 5.85, 34.5, 14.0, 12.0; Co (0.5) 10.0, 7.1, 9.0, 8.45, 31.0, 11.0, 18.0; Co (1.0) 18.3, 5.9, 8.35, 7.05, 30.7, 17.0, 18.3; Ti (1.0) 17.8, 0.15, 7.85, 0.0, 32.3, 14.7, 17.8; Ti (5.0) 23.8, 5.2, 5.8, 4.65, 32.0, 18.4, 23.8. The effect of Al₂O₃ in small amts. is ascribed to blocking of active centers of Cu; introduction of higher amts. produces new boundaries between dehydrogenating (Cu) and dehydrating (Al₂O₃) portions of the catalyst and creates new centers for reaction III. The insignificant effect of the variation of the amt. of Co is due to the side reaction of decompn. of AcH. Introduction of Ti evidently results only in creation of aldnl. centers for reaction III, without any initial blocking. (2) In the order of catalysts (and amts. of promoter) given above, the resp. ratios y_I/y_{II} , y_{II}/y_{III} ,

E_I/E_{III} , E_{II}/E_{III} (at 275°) are: 1.21, 0.81, 0.80, 1.10; 3.04, 2.08, 1.06, 2.8; 3.45, 2.09, 0.62, 0.49; 6.73, 0.85, -, -, 2.08, 1.19, 1.58, 2.28; 3.40, 1.13, 2.54, 2.65, 2.36, 1.21, 2.71, 2.00; 2.30, 0.85, 0.84, 1.11, 1.90, 0.91, 0.81, 1.14; -, 0.93, 1.03, 1.30; 1.77, 0.88, 1.12, 1.25. In particular, the passivating effect of Zn and the activating effect of Ti are in agreement with the conditions formulated in Part I under (3) and (4). At all 4 temps. 200°, 250°, and 275°, introduction of about 0.1% Zr depresses the activity of the catalyst (min.); further increase of Zr raises y uniformly, except that at 280° increase of Zr beyond 0.01% causes no further rise in y . There is, consequently, both a lower and an upper limit of promoting activity. Data (selected) at 275°, of E_I , E_{II} , E_{III} , y_I , y_{II} , y_{III} for Zr (amt. in %, of the wt. of Cu are: 0.1% 5.2, 0.5, 3.0, 31.2, 12.6, 8.3; 0.31 5.95, 7.65, -, 10.8, 13.0, 11.8; 0.71 6.3, 5.75, 1.3, 28.9, 22.3, 28.6, 1.1) = 5.3, 7.9, 6.6, 32.0, 28.0, 31.3; E_{II} and E_{III} are non- (5.85 and 2.0, resp.) at Zr 0.5%. Up to 0.1% Zr, there is a limited no. of highly active centers on which reaction III can proceed. Between 0.4 and 0.9%, the no. of centers increases but their activity is lower; at 0.8-0.9%, E_{III} is higher and so is y . The conditions $y_I < y_{II} < y_{III}$ and $E_I \approx E_{III} < E_{II}$ are fulfilled. N. Thom

Be. 660

*C-4 General Technique
Lab. Notes*

1297. Apparatus for homogeneous catalysis in the vapour phase.
D. N. Yashkovitch (*Bull. Acad. Sci. USSR, Ser. Chem.*, 1948, 325
326).—In the ordinary horizontal catalyst tube only 15–20 cm.
are used for catalyst, the remainder being used as vaporiser
and preheater; a clear space is formed above the catalyst
through which vapour may pass unchanged. The new apparatus
consists of two wider vertical tubes united below. The first, the
preheater, is filled with glass beads or crushed quartz. The second
has a grid on which the catalyst is evenly placed to the desired depth,
thus making all conditions easily reproducible. R. TORRIS.

g

30

Use of insoluble polymers of methyleneurea in the production of plastic masses. D. N. Vaskovskii and B. Ya. Reinguch. *Khim. Prom.* 1946, No. 9, 22. Methyleneurea, sol. in formalin only 30%, and contg. 0.81% of free methylol radicals, was condensed with formalin. Best results were obtained by using a ratio of polymer to 60% CH_2O of 1:2. The condensation product had pH 2.5-7.5, contained free CH_2O 0-8%, and had Ostwald viscosity 17-25. Molding products were produced by adding a 10% Na_2CO_3 soln. to a pH 6.0-6.2, additional urea to combine with the free CH_2O , and a filler. M. Ilowch

M. Hersh

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

32

Catalytic conversion of paraffins into aromatic hydro-
carbons. S. L. Lel'chuk and D. N. Vaskevich. U.S.S.R.
69,887, Dec. 31, 1947. The conversion is catalyzed by
Cr-Al fused (solid) or shaped catalyst. M. Hosh

Kinetics of the reaction of direct esterification of alcohol. III. Effect of the composition of polycomponent catalysts on the kinetics of the reaction. S. L. Lefchuk, D. N. Vaskevich, A. P. Belen'kaya, and P. A. Dashkovskaya (Acad. Sci. U.S.S.R., Moscow). Bull. acad. sci. U.R.S.S., Classe sci. chim. 1947, 235-8 (in Russian); Cf. C.A. 32, 7893. The effects of the introduction of a 3rd component into a Cu-based binary catalyst were studied on the direct esterification reaction, assumed to proceed over the stages: (I) $RCH_2OH \rightarrow RCHO + H_2$, (II) $RCHO + H_2O \rightarrow RCOOH + H_2$, (III) $RCH_2OH + RCOOH \rightarrow RCH_2OCOR + H_2O$. At 275°, the simple Cu catalyst gave an ester yield of $\gamma = 12.3\%$, the binary Cu + 2% Ce, 37%. Under the same conditions, the effects of a 3rd component (wt. % relative to Cu) were: BaO (10) $\gamma = 4.7\%$; Al_2O_3 (5) 19.8%; MnO (2) 3.82%; Ag (5) 0.68%; Ni (5) 11.3% (the last at 260°). In all these cases, a 3rd component lowered γ markedly. However, although in the case of Ag (a dehydrogenating agent) the ternary catalyst has an activity lower than either Cu + Ce or Cu + Ag, the activity of the ternary catalyst with Al_2O_3 (a condensing agent) lies below that of Cu + Ce but above Cu + Al_2O_3 . Thus, whereas addn. of Ag results in copassivation, the ternary catalyst with Al_2O_3 has an activity intermediate between the activities of its constituent binary pairs. If the 3rd component is a con-

densing agent, the activity of the ternary catalyst shown increase with its concn. This is actually shown by catalysts Cu + 10% Al_2O_3 + TiO_2 ; at 275°, with TiO_2 0, 2, and 5%, $\gamma = 22.5, 20.9$, and 30.6%. In this instance of coactivation, the activity of the ternary catalyst is higher than that of either of the pairs Cu + Al_2O_3 or Cu + TiO_2 . Similarly, in the case of a passivating 3rd component, the activity of the ternary catalyst decreases with increasing concn., e.g., Cu + Ce + Ni, at 275°, Ni 0, 5, and 10%, $\gamma = 20, 11$, and 5.5%; the ternary catalysts are less active than either Cu + 10% Al_2O_3 or Cu + Ni 14.2%. The ternary Cu + Al_2O_3 or Cu + 2% Cr_2O_3 is more active than either Cu + Al_2O_3 or Cu + Cr_2O_3 ; addn. of Ni (a dehydrogenating agent) as a 4th component lowered the activity: at 275°, Ni 0, 0.02, 0.1, and 1.0%, $\gamma = 31.4, 25.2, 27.2$, and 20.6%. At the same time, the activation energy of step III increases, from 4.4 to 8.0 kcal./mole for Ni from 0 to 0.1%; that of step I decreases from 6.5 to 2.5 for Ni from 0 to 1.0%. Addn. of a 3rd component to Cu + 10% Al_2O_3 ($\gamma = 22.5\%$ at 275°, space velocity 600 ml./l./hr.) gave the activities: Cr_2O_3 (2) 27.7%; TiO_2 (5) 30.5%; TiO_2 (3) 31.6%. Although Cr_2O_3 has but little effect on the activity and the activation energy of step III is high (14.5 kcal.), the Cr_2O_3 , TiO_2 , and TiO_2 ternary catalysts are clear instances of coactivation (activation energies of III, 2.4, 5.75, and 5.75 kcal.); these ternary catalysts have a higher activity than either of the constituent binary pairs. N. Thon.

VASKOVICH, D.A.

ARBUZOV, B.A., redaktor; DOLGOPOLSK, B.A., redaktor; KARGIN, V.A., redaktor;
MEDVEDEV, S.S., otvetstvennyy redaktor; RAFIKOV, S.R., redaktor;
ROGOVIN, Z.A., redaktor; VASKOVICH, D.A., redaktor izdatel'stva;
SIMKINA, Ye.N., tekhnicheskiiy redaktor

[Proceedings of the third conference on high molecular weight
compounds; polymerization and polycondensation] Trudy tret'sei
konferentsii po vysokomolekulyarnym soedineniyam; polimerizatsiya
i polikondensatsiya. Moskva, Izd-vo Akademii nauk SSSR, 1948.
177 p. (MLRA 10:1)

1. Konferentsiya po vysokomolekulyarnym soedineniyam. 3d, Moscow,
1945.

(Polymerization) (Condensation products (Chemistry))

27

Theories of Condensation and Polymerization in Organic Chemistry. (In Russian.) D. N. Vaskayich and A. A. Balandin. *Dopekhi Khimii* (Progress in Chemistry), v. 17, May-June 1948, p. 346-350.

Describes development of above theories and clarifies the present status of this problem. On the basis of existing data and his own experience, the author believes that there is a large difference between the two types of reaction. 48 ref.

ABR-56A METALLURGICAL LITERATURE CLASSIFICATION

P.A.

Determination of phthalic acid esters by a luminescence method. D. N. Yaskovich (All-Union Sci. Research Inst. Ind. Hyg., Moscow) *Zhne. Ind. Khim.* 5, 351-7 (1950). This method consists in decomposing the phthalate with hydroxide, thereby forming a phthalic acid salt, and treating the latter with H_2SO_4 to yield phthalic anhydride. After this the anhydride is fused with resorcinol to form fluorescein which in an alk. soln. fluoresces green in visible light and yellow in ultraviolet light. Inasmuch as the procedure is multistaged it must be followed carefully. The procedure was worked out for dimethylphthalate. M. H.

VASIL'YEV, A.M.; VASKEVICH, D.B., redaktor; ZALYSHKINA, O.V., tekhnicheskii redaktor.

[Collection of problems on analytical chemistry] Sbornik zadach po analiticheskoi khimii. Moskva, Gos. nauchno-tekhn. izd-vo khim. lit-ry, 1951. 301 p. (MIRA 8:1)
(Chemistry, Analytical)

CA

7

Colorimetric determination of small quantities of diatomic phenols. D. N. Vaskevich and Ts. A. Gol'dina. *Zhur. Priklad. Khim.* (J. Applied Chem.) 24, 1214-16 (1951). Hydroquinone (I), resorcinol (II), and catechol (III) can be readily detected by treatment with an NH_4OH soln. of CuSO_4 , followed by colorimetry of the resulting substance. I gives yellow-pink color turning yellow-brown in 5 min., III gives a pale yellow color, while II gives a bright yellow color which develops only slowly (max. in 15-17 hrs.). As standards, known solns. are run simultaneously. Usually only 0.05 mg. or more can be detd. with accuracy.

G. M. Kosolapoff

1952

SHAPIRO, S.A.; VASKEVICH, D.N., redaktor.

[Qualitative analysis] Kachestvennyi analiz. Izd.2. Moskva,
Gos.nauchno-tekhn. izd-vo khim. lit-ry, 1953. 227 p. (MIRA 7:3)
(Chemistry, Analytic--Qualitative)

$V_{42} = 0.000077 \text{ m}^3$

U S S R .

USSR.
Determination of small amounts of naphthols by a
luminescence method. D. N. [unclear] April
Chem. USSR 20 [unclear] [unclear]
see 1 48 7524

VASKEVICH, D.N.

Determination of small quantities of naphthols by the luminescence method.
(MIRA 6:11)
Zhur.prikl.khim. 26 no.11:1213-1217 N '53.

1. Vsesoyuznyy Nauchno-issledovatel'skiy institut okhrany truda Vsesoyuznogo
tsentral'nogo soveta profsoyuzov. (Naphthol)

KORENMAN, I.M., professor; VASKOVICH, D.N., redaktor; DUBOVKINA, N.A.,
tekhnicheskiiy redaktor. ~~tekhnicheskiiy redaktor.~~

[Microcrystalloscopy] Mikrokristalloskopiia. Moskva, Gos.nauchno-
tekhn.izd-vo khimicheskoi lit-ry, 1955. 431 p. (MLRA 8:10)

1. Gor'kovskiy gosudarstvennyy universitet (for Korenman).
(Crystallography)

VASKEVICH, D. N.
USSR/Chemistry - Analytical, Industrial toxicology

FD-1203

Card 1/1 Pub 50-7/19

Author : Vaskevich, D. N., Khokhlova, R. V.

Title : Determination of dibenzothiazoledisulfide (altax) in the air of industrial establishments

Periodical : Khim. prom., No 2, 87-91 (23-27), Mar 1955

Abstract : Three methods (colorimetric, nephelometric, and volumetric) for the determination of altax (a vulcanization accelerator) in the air of industrial establishment have been developed. In all 3 methods the altax is first reduced to captax (the corresponding thiol). A procedure for the analysis of mixtures of altax and captax has also been developed and is described. Seven references, two USSR, both since 1940. Four tables.

Institution: All-Union Scientific Research Institute of Labor Protection, All-Union Central Council of Labor Unions; Dorogomilovo Chemical Plant imeni M. V. Frunze

VASKEVICH, D. N.

2

✓ The T-acid determination in H-acid by the luminescence chromatographic method. D. N. Vaskevich. *Khim. Prom.* 1955, 428-30. — A determination of the T-acid (I) and the H-acid (II) is based on the difference in the adsorption of the acids by activated Al_2O_3 ; it requires small amounts of the sample, and can be completed in about 1 hr. The columns used were 3 mm. in diameter, 110 mm. long, and a slight vacuum was used to hasten the flow. An upper II zone and a lower I zone with no intermediate zone was observed; 0.3-0.5 ml. soln. was needed. Only I can be quantitatively washed out of the column. The min. I concn. limit is 0.1 γ in 10 ml. soln. and of II 0.3 γ /10 ml. W. M. S.

CH

AK

VASKEVICH D.N.

Category : USSR/Optics - Optical Methods of Analysis. Instruments

K-7

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 5199

Author : Vaskevich. D.N., Sergeyeva, T.I.

Title : Concerning a Visual Method for Observing Fluorescence.

Orig Pub : Zavod. laboratoriya, 1955, 21, No 11, 1385-1386

Abstract : The observation is carried out against a black background along the axis of the test tube with the ultraviolet beam being perpendicular to its axis. This method of observation is more effective than that usually employed, in which the observation is carried out perpendicular to the axis of the test tube or at an angle to the axis.

Card : 1/1

VASKEVICH, D. N.

FD-3369

USSR/Chemistry - Chromatography, Dyestuffs

Card 1/1 Pub. 50 - 13/20

Author : Vaskevich, D. N.

Title : Determination by luminescence chromatography of the T-acid content in H-acid

Periodical : Khim. prom. No 7, 428-430, Oct-Nov 1955

Abstract : The determination of H-acid and T-acid by the luminescence method has been investigated. A luminescence method for the quantitative determination of H-acid and T-acid has been developed. The possibility of analyzing mixtures of H-acid with T-acid on the basis of the luminescence color of solutions of mixtures of these two acids has been investigated. A chromatographic method for the separation of H-acid from T-acid followed by a quantitative determination of the latter has been proposed. Four references, all USSR, all since 1940.

Institution : All-Union Scientific Research Institute of Labor Protection, All-Union Central Council of Labor Unions

VASKEVICH, D. N.

USSR.

V 2962. Trapping of aerosols in taking samples of air from production sites. (D. N. Vaskevich and S. S. Gurvits (Zarod. Lab., 1956, 21 (1), 33-34).—Experiments were carried out on aerosols produced by heating 1- or 2-naphthol in a porcelain dish. Filters of various pore-sizes were placed at different distances from the fog generator and the rate of suction of air through the filters was varied. The samples were removed from the filters by means of ethanol under suction. Particle sizes of material collected on a microscope slide were also determined. It is shown that there is a limiting rate of flow of air above which a filter becomes ineffective. Results for various filters, flow rates, etc., are tabulated. G. S. SMITH

AA
MKT

VASKEVICH, David Naumovich; DENISOVA, I.S., redaktor; RAKOV, S.I., tekhnicheskii redaktor

[Luminescence analysis in industrial sanitary chemistry] Lumines-tsennyi analiz v promyshlennosanitarnoi khimii. [Moskva] Izd-vo VTsSPS Profizdat, 1956. 78 p. (MLRA 9:10)
(Luminescence) (Industrial hygiene)

Vaskevich, D.N.

PHASE I BOOK EXPLOITATION 1069

Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti

Analiticheskiy kontrol' proizvodstva v azotnoy promyshlennosti. vyp. 2: Kontrol' proizvodstva ammiachnoy selitry (Analytical Production Control in the Nitrogen Industry. Nr 2: Production Control of Ammonium Nitrate) Moscow, Goskhimizdat, 1956. 87 p. 4,000 copies printed.

Additional Sponsoring Agency: U.S.S.R. Ministerstvo khimicheskoy promyshlennosti

Ed.: Vaskevich, D.N.; Tech. Ed.: Korneyeva, V.I.

PURPOSE: The book is intended for employees of analytical laboratories in ammonium nitrate manufacturing plants and for students of institutes and tekhnikums of chemical technology.

COVERAGE: The book describes methods for controlling the manufacture of ammonium nitrate. There are no personalities. No references are given.

Card 1/7

Analytical Production Control (Cont.) 1069

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AVAILABLE: Library of Congress	

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TM/mas
1/23/59

VASKEVICH D.N.

PHASE I BOOK EXPLOITATION

1071

Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti

Analiticheskiy kontrol' proizvodstva v azotnoy promyshlennosti. vyp. I: Kontrol' v gazogeneratornom tsekhe i otdeleniyakh konversii okisi ugleroda, vodnoy i medno-ammiachnoy ochistki (Analytical Control of Production in the Nitrogen Industry. Nr 1: Control in the Gas Generating Plant and in the Carbon Monoxide Conversion and Water and Copper-Ammonium Purification Sections) Moscow, Goskhimizdat, 1956. 175 p. 4,000 copies printed.

Additional Sponsoring Agency: USSR. Ministerstvo khimicheskoy promyshlennosti

Ed.: Vaskevich, D.N.; Tech. Ed.: Korneyeva, V.I.

PURPOSE: The book is intended for employees of analytical laboratories in the nitrogen industry plants and for students of institutes and tekhnikums of chemical technology.

Card 1/9

Analytical Control of Production (Cont.)

1071

COVERAGE: A detailed description is given of the control of manufacturing processes in the gas producer compartment and in the compartments for carbon monoxide conversion and for cuprammonium purification. No personalities are mentioned. There are no references.

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Card 2/9

VASKEVICH, D N

USSR/Analytical Chemistry. General Topics.

Abs Jour : Referat. Zhurnal Khimii, No 6, 1957. 19518.

Author : D.N. Vaskevich.

Inst : -

Title : Luminescent Analysis in Industrial-Sanitary Chemistry.

Orig Pub : M., Profizdat., 1956, 80 str., ill., 1 r. 90 k.

Abstract : No abstract.

Card 1/1

-29-

VASKEVICH, D.N.; BULYCHEVA, A.I.; MEL'NIKOVA, P.A.

Rapid method of determining the amount of carbon monoxide in
the air in factories. Vod.1 san.tekh. no.1:12-13 Ja '56.
(MLRA 9:5)

(Air--Analysis) (Ventilation)

VASKEVICH-D.N.

Rapid method of determination of small amounts of 1-naphthylamine in air of industrial establishments. D. N. Vaskevich and T. I. Sergeeva. (All-Union Sci. Research Inst. Labor Protection, Moscow). *Gigiena i Sanit.* 21, No. 3, 41-4 (1960).—The sample is brought into contact with a soln. of diazoaminobenzene in EtOH in the presence of 70% AcOH; 1-C₁₀H₇NH₂ produces a raspberry color which is photometered against a standard scale. Sensitivity: 0.3 γ /3 ml.; limiting concn.: 1×10^{-7} . The standard scale maintains color for months. A 3-fold excess of 2-C₁₀H₇NH₂ does not interfere. A design for a multibulb absorber with glass beads and cotton is shown. G. M. Kosolapov

(low)
2

5(1)

PHASE I BOOK EXPLOITATION

SOV/1261

Gosudarstvennyy nauchno-issledovatel'skiy i proyektyny institut azotnoy promyshlennosti

Analiticheskiy kontrol' proizvodstva v azotnoy promyshlennosti. vyp. 4: Kontrol' v tsekhe razdeleniya vozdukha (Analytical Control of Production in the Nitrogen Industry. v. 4: Control in Shops Conducting Fractional Distillation of Air) Moscow, Goskhimizdat, 1957. 89 p. 3,000 copies printed.

Ed.: Vaskevich, D.N.; Tech. Ed.: Lur'ye, M.S.

PURPOSE: The book is intended for employees of analytical laboratories in the nitrogen industry plants and for students of chemistry technology institutes and tekhnikums.

COVERAGE: This fourth issue of the series Analiticheskiy kontrol' proizvodstva v azotnoy promyshlennosti (Analytic Control of Production in the Nitrogen Industry) contains detailed descriptions of methods for controlling the air distribution compartment. The unified control methods developed by the nitrogen industry are included in this issue. These methods were developed and checked

Card 1/4

Analytical Control of Production (Cont.)

SOV/1261

by the plant control laboratories and by the "Gosudarstvennyy nauchno-issledovatel'skiy i proyektivnyy institut azotnoy promyshlennosti" and by other laboratories. No personalities are mentioned. There are no references.

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Analytical Control of Production (Cont.)

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AVAILABLE: Library of Congress (TP245.N8A73)

TM/mfd
4-4-59

Card 4/4

PHASE I BOOK EXPLOITATION 1070

Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti

Analiticheskiy kontrol' proizvodstva v azotnoy promyshlennosti. vyp.6: Kontrol' proizvodstva v tsekhe mysh'yakovo-sodovoy ochistki (Analytical Production Control in the Nitrogen Industry. No. 6: Production Control in the Arsenic-Soda Purification Shop) Moscow, Goskhimizdat, 1957. 98 p. 3,000 copies printed.

Additional Sponsoring Agency: U.S.S.R. Ministerstvo khimicheskoy promyshlennosti

Ed.: Vaskevich, D.N. Tech. Ed.: Lur'ye, M.S.

PURPOSE: The book is intended for employees of analytical laboratories in nitrogen industry plants and for students of institutes and tekhnikums of chemical technology.

COVERAGE: The book describes methods of controlling industrial processes in shops for arsenic-soda purification of technical gas. No references are given. There are no personalities.

Card 1/6

Analytical Production Control in the Nitrogen (Cont.) 1070

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VASKEVICH, D. N.

PHASE I BOOK EXPLOITATION

80V/1669

5(2)

Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti.

Analiticheskiy kontrol' proizvodstva v azotnoy promyshlennosti, vyp. 3:
Kontrol' na gazodувoy stantsii i v otdalenyakh oshistki i razdeleniya
koksovogo gaza (Analytical Production Control in Nitrogen Industry, pt. 3:
Controls in gas-blowing stations and shops for purification and separation
of coke gas) Moscow, Goskhimizdat, 1957. 143 p. 3,000 copies printed.

Additional Sponsoring Agency: USSR. Ministerstvo khimicheskoy promyshlennosti.

Ed.: D.N. Vaskevich; Tech. Ed.: M.S. Lur'ye

PURPOSE: This book is intended for workers in analytical laboratories of nitrogen plants and may be used as a textbook for students in chemical engineering institutes and technical schools.

COVERAGE: The book describes standard methods of control in coke gas production.

Card 1/7

Analytical Production Control (Cont.)

SOV/1669

The methods of control apply to coke gas purification of carbon dioxide by means of gas blowing, dry treatment with sulfur, water scrubbers, and alkaline wash; to coke gas purification of carbon dioxide and hydrogen sulfide by means of ethanolic treatment; and to gas separation. The volume was compiled by the staff of the analytical laboratory of GIAP - Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti (State Scientific Research and Planning Institute of the Nitrogen Industry). The methods were developed and verified by the staff of the GIAP laboratory in cooperation with plant laboratories. There are no references given.

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5-26-59

Card 7/7

VASKEVICH, D.N.

PHASE I BOOK EXPLOITATION 1219

Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti

Analiticheskiy kontrol' proizvodstva v azotnoy promyshlennosti. vyp. 7: Kontrol' proizvodstva v tsekhe sinteza ammiaka (Analytical Production Control in the Nitrogen Industry. No. 7: Production Control in the Ammonia Synthesis Section, Moscow, Goskhimizdat, 1958. 114 p. 2,500 copies printed.

Ed.: Vaskevich, D.N.; Tech. Ed.: Zazul'skaya, V.F.

PURPOSE: The book is intended for employees of analytical laboratories in nitrogen industry plants and for students of technikums and institutes of chemical technology.

COVERAGE: The seventh issue of the collection "Analytical Production Control in the Nitrogen Industry" describes methods of controlling industrial processes in the ammonia synthesis section. No personalities are mentioned. There are no references.

Card 1/5

Analytical Production Control in the Nitrogen (Cont.) 1219

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99

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- I. Nomogram for Reducing Gas Volumes to Normal Conditions
- II. Sectional Drawings of Apparatus

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AVAILABLE: Library of Congress

Card 5/5

TM/fal
2-24-59

ALEKSEYEV, Vladimir Nikolayevich; VASKEVICH, D.N., red.; LUR'YE, M.S.,
tekhn.red.

[Course in analytical chemistry] Kurs analiticheskoi khimii.
Izd.6. Moskva, Gos.nauchno-tekhn.isd-vò khim.lit-ry, 1958.
436 p. (MIRA 12:7)

1. Moskovskiy institut stali im. I.V.Stalipa (for Alekseyev).
(Chemistry, Analytical)

ALEKSEYEV, Vladimir Nikolayevich [deceased]; VASKEVICH, D.M., red.;
LUR'YE, M.S., tekn.red.

[Quantitative analysis] Kolichestvennyy analiz. Izd.2., perer.
Moskva, Gos. nauchno-tekhn. izd-vo khim. lit-ry, 1958. 559 p.
(MIRA 12:1)

1. Moskovskiy institut stali im. I.V. Stalina (for Alekseyev).
(Chemistry, Analytical--Quantitative)

AUTHORS: Khokhlova, R. V., ~~Vaskevich, I. A.~~ 68-56-2-12/16
With the Members of the TsZL Breytbart, B.
I., Otrokova, T. K., Isayeva, M. V.

TITLE: The Determination of Small Amounts of Diphenyl-Guanidine
in the Air of Industrial Working Rooms (Opredeleniye ma-
lykh kolichestv difenilguanidina v vozdukh proizvodst-
vennykh pomeshcheniy)

PERIODICAL: Khimicheskaya Promyshlennost', 1958, Nr 2, pp. 52-54 (USSR)

ABSTRACT: Two methods of determination are described, a volumetric and
a colorimetric method. According to the former diphenyl gua-
nidine dissolved in alcohol is titrated with 0.01 N sulfu-
ric acid using a Reberg-absorber; bromophenol blue or fluo-
rescein were used as indicators. The accuracy of determina-
tion amounts to $\pm 5\%$ at a content of diphenyl guanidine of
from 0.2-2 mg and up to $\pm 15\%$ at a content of 0.1 mg. In or-
der to determine the effect of admixtures titrations of tech-
nical products were carried out, and as is seen from a table
errors of +1.12% to -6.4% were found. The second method of

Card 1/3

The Determination of Small Amounts of Diphenyl-
Guanidine in the Air of Industrial Working Rooms

64-58-2-12/16

determination is based on the reaction of diphenyl guanidine with cobalt oleate under the formation of a violet compound. The intensity of this color is compared with a standard series and thus diphenyl guanidine is determined. The measurement of intensity can be carried out visually or by means of a photocolormeter. The production of cobalt oleate as well as the production of the standard series are described. In order to determine the effect of other accelerators which might eventually exist besides diphenyl guanidine in the atmosphere of rubber industry plants on the two methods, determinations were carried out in the presence of Altax, Thiuram and Captax. In this it was found that the latter disturbs colorimetric determination and that therefore the volumetric method must be applied in this case. A table of the results of determination with diphenyl guanidine-Captax mixtures is given. The air to be investigated was directed through a porous filter over an aspirator; the filter was washed with alcohol or benzene, and the washing liquid was subjected to the described determina-

Card 2/3

The Determination of Small Amounts of Diphenyl-
Guanidine in the Air of Industrial Working Rooms

64-56-2-12/16

tions of diphenyl guanidine.

There are 1 figure, 2 tables and 9 references, 4 of which
are Soviet.

ASSOCIATION: Dorogomilovskiy khimicheskiy zavod imeni M. V. Frunze i
Vsesoyuznyy nauchno-issledovatel'skiy institut okhrany
truda VTsSPS (Dorogomilovsk Chemical Plant imeni M. V.
Frunze and All-Union Scientific Research Institute for
Accident Prevention VTsSPS)

AVAILABLE: Library of Congress

1. Diphenyl guanidines--Determination
2. Air--Impurities
3. Air--Colorimetric analysis

Card 3/3

KONOVALOV, Petr Gordeyevich; VASKEVICH, D.N., red.; AVRAMENKO, Ye.I.,
red. izd-va; GARINA, T.D., tekhn. red.

[Plastics, their properties and use in industry; reference manual]
Plasticheskie massy, ikh svoistva i primeneniye v promyshlennosti;
spravochnoe posobie. Moskva, Gos. izd-vo "Vysshaya shkola," 1961.
180 p. (MIRA 14:8)

(Plastics)

KOL'TGOF, I.M. [Kolthoff, I.M.]; BELCHER, R.; STENGER, V.A.; MATSUYAMA, Dzh.
[Matsuyama, G.]; LUR'YE, Yu.Yu., prof., red.; VASKEVICH, D.N., red.;
ZAZUL'SKAYA, V.F., tekhn. red.

[Volumetric analysis] Ob"emnyi analiz. Pod red. i s dopolneniami
IU.IU.Lur'e. Moskva, Gos. nauchno-tekhn. izd-vo khim. lit-ry.
Vol.3.[Practical part; oxidation-reduction methods] Prakticheskaya
chast': Metody okisleniya--vosstanovleniya. 1961. 840 p. Publ. in
English under the title: "Titration methods: oxidation-reduction
reaction.

(MIRA 14:8)

(Chemistry, Analytical) (Oxidation-reduction reaction)

KNUNYANTS, I.L., glav. red.; BAKHAROVSKIY, G.Ya., zam. glav. red.;
 BUSEV, A.I., red.; VARSHAVSKIY, Ya.M., red.; GEL'FERIN,
 N.I., red.; DOLIN, P.I., red.; KIREYEV, V.A., red.; MEYERSON,
 G.A., red.; MURIN, A.N., red.; POGODIN, S.A., red.; REBINDER,
 P.A., red.; SLONIMSKIY, G.S., red.; STEPANENKO, B.N., red.;
 EPSHTEYN, D.A., red.; VASKEVICH, D.N., nauchnyy red.; GALLE,
 R.R., nauchnyy red.; GARKOVENKO, R.V., nauchnyy red.; GODIN,
 Z.I., nauchnyy red.; MOSTOVENKO, N.P., nauchnyy red.;
 LEBEDEVA, V.A., mladshiy red.; TRUKHANOVA, M.Ye., mladshiy
 red.; FILIPPOVA, K.V., mladshiy red.; ZHAROVA, Ye.I., red.;
 KULIDZHANOVA, I.D., tekhn. red.

[Concise chemical encyclopedia] Kratkaia khimicheskaiia entsiklo-
 pediia. Red. koll.: I.L.Knuniants i dr. Moskva, Gos. nauchn.
 izd-vo "Sovetskaia entsiklopediia." Vol.1. A - E. 1961.
 1262 columns. (MIRA 15:2)

(Chemistry--Dictionaries)

GAYDAY, Stepan Grigor'yevich; LAZINTSEV, Dmitriy Nikiforovich;
VASKEVICH, D.N., spets. red.; KUZNETSOVA, N.I., red.;
KOROBKOVA, N.D., tekhn. red.

[Safety measures in the repair and assembly of equipment in
the chemical industries] Tekhnika bezopasnosti pri remonte i
montazhe oborudovaniia v khimicheskoi promyshlennosti. Mo-
skva, Profizdat, 1962. 127 p. (MIRA 15:5)
(Chemical engineering--Safety measures)

VASKEVICH, D. N.

Scientific and technical conference on the methods for the analysis
of industrial waste waters. Zhur. VKHO 7 no.5:571-572 '62.
(MIRA 15:10)

(Sewage—Analysis)

VASKEVICH, D.N., kand.khimicheskikh nauk

"Techniques of work with mercury under laboratory conditions"
by P.P.Pugachevich. Reviewed by D.N.Vaskevich. Zav.lab. 28
no.3:390-391 '62. (MIRA 15:4)
(Mercury) (Chemical laboratories)
(Pugachevich, P.P.)

CHERNYAK, M.G., red.; ASLANOVA, M.S., red.; ZAK, A.F., red.;
IVANOVA, A.I., red.; KUTUKOV, S.S., red.; PANASYUK, V.I.,
red.; SHKOL'NIKOV, Ya.A., red.; VASKEVICH, D.N., red.;
SHPAK, Ye.G., tekhn.red.

[Methods for testing and quality control of fiber-glass materials]
Metody issledovaniia i kontroliia steklovoloknistykh materialov;
sbornik statei pod red. M.G. Cherniaka. Moskva, Goskhimizdat,
1963. 92 p. (MIRA 16:6)

1. Vsesoyuznyi nauchno-issledovatel'skii institut stekliannogo
volokna.

(Glass fiber industry--Testing)

LUR'YE, Yuliy Yul'yevich; RYBNIKOVA, Anastasiya Ivanovna; VASKEVICH,
D.N., red.; SHPAK, Ye.G., tekhn. red.

[Chemical analysis of industrial waste waters] Khimicheskii analiz
proizvodstvennykh stochnykh vod. Izd.2., perer. i dop. Moskva,
Goskhimizdat, 1963. 251 p. (MIRA 16:3)
(Sewage--Analysis)

ALESKOVSKIY, V.B., prof.; BARDIN, V.V.; BOYCHINOVA, Ye.S.;
BULATOV, M.I.; VASIL'YEV, V.P.; DOBYCHIN, S.L.; DUSHINA,
A.P.; KALINKIN, I.P.; KEDRINSKIY, I.A.; LIBINA, R.I.;
PRIK, K.Ye.; SETKINA, O.N.; KHEYFETS, Z.I.; YATSIMIRSKIY
K.B., prof.; VASKEVICH, D.N., red.

[Physicochemical methods of analysis ; a laboratory manual]
Fiziko-khimicheskie metody analiza; prakticheskoe rukovod-
stvo. Moskva, Khimiia, 1964. 451 p. (MIRA 17:12)

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AUTHOR: Belyakova, A. P.; Bokov, Yu. S.; Lavrishchev, V. P.; Konovalov, P. G.;
Vaskevich, D. N.

TITLE: Photosensitivity of poly(vinyl cinnamate) and its nitro-derivatives

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 9, 1965, 1637-1640

TOPIC TAGS: polymer, photosensitivity, polyvinylcinnamate, photosensitive polymer

ABSTRACT: The purpose of this work was to clarify the effect of substituents in the monomer molecule on the photosensitivity of the polymer. Poly(vinyl cinnamate) and the o, m, and p-nitroderivatives were prepared by heating poly(vinyl alcohol) (mol. wt. 12,000, 0.72% acetate groups) in pyridine for 4 hours at 50C with cinnamyl chloride, or the appropriate nitrocinnamyl chloride. Polymer films, 100 ± 10 μ thick, were irradiated with ultraviolet light and their thermomechanical properties, solubilities, ultraviolet and infrared spectra were measured and compared to those of untreated films. It was found that the photosensitivity of the compounds in-

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creases in the following order: poly(vinyl cinnamate) (PVC) > o-NO₂-PVC >
m-NO₂-PVC > p-NO₂-PVC. Orig. art. has: 2 figures and 2 tables.

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